



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,700	12/08/2003	Karl Rafeld	KWO-18502/01	3992

25006 7590 12/17/2004

GIFFORD, KRASS, GROH, SPRINKLE
ANDERSON & CITKOWSKI, PC
280 N OLD WOODARD AVE
SUITE 400
BIRMINGHAM, MI 48009

EXAMINER

NGUYEN, SON T

ART UNIT PAPER NUMBER

3643

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/730,700

Applicant(s)

RAFELD, KARL

Examiner

Son T. Nguyen

Art Unit

3643

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/5/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 13-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3952807 (herein 807) in view of US 6401828 (herein 828).

For claim 13, 807 teaches a lining usable with a horseshoe 6 comprising a hoof pad defining a periphery and a pair of legs, said pad being adaptable to a sole of a hoof, said lining comprising: a flat plate 17 defining a periphery and comprising a flexible plastic material, said plate being positionable within a space definable by said plate and said sole of said hoof so as to avoid adhesion of snow and ice on said sole of said hoof; a tubular hump 15, 15', 16 positioned along said periphery of said flat plate, said hump further defining said space definable by said plate and said sole of said hoof, said hump being tubular in shape and is adapted to extend to a connecting bar usable to connect said pair of legs of said hoof pad substantially near ends of said legs, said hump being formed of separated portions (see fig. 6, the humps 15 separate at the front area at ref. 14) so as to provide an interruption along its extent substantially adjacent connection of said legs of said hoof pad and comprising at least one substantially tubular hollow space which is circle in shape (see fig. 12) and extends throughout, said separated portions of said hump being positioned in an upright stance on said flat plate and

Art Unit: 3643

adapted to extend substantially up to a front end of said hoof pad; said plate being substantially similar in shape to that of said hoof pad so as to follow the periphery thereof. However, 807 lacks a connecting bar on the horseshoe, the hollow space being oval in shape, and the plate being free of the hump beyond a point of connection of the legs by the connecting bar.

It would have been an obvious substitution of functional equivalent to substitute the circular hollow space of 807 with an oval hollow space, since it would perform the same function; i.e. to prevent snow and ice from entering the horseshoe.

828 teaches hoof pad having bridge-like connecting bar 111 and lining 128,129 extending to the connecting bar. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ bridge-like connecting bar as taught by 828 on the horseshoe of 807 to transfer pressure forces (col. 2, lines 1-10 of 828). In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to terminate the hump on the plate beyond a point of connection of the legs by the connecting bar of 807 as modified by 828 in order to prevent the hump from interrupting with the connection of the connecting bar and the legs.

For claim 14, 807 as modified by 828 teaches wherein: said at least one substantially tubular hollow space comprises a profile which is similarly configured throughout said separated portions of said hump. Both sides of ref. 15 before stopping at the front end ref. 14 are similar in profile as shown in fig. 12.

For claims 15 & 16, it would have been an obvious substitution of functional equivalent to substitute the circular hollow space of 807 as modified by 828 with an ellipse hollow space, since it would perform the same function; i.e. to prevent snow and ice from entering the horseshoe. 807 already teaches wherein: the at least one ellipse is adapted to be positioned in an upright stance relative to said sole of said hoof such that the smaller axis thereof extends generally parallel to said sole of said hoof and the larger axis thereof extends generally parallel to the height of the hump (see fig. 7, ref. 15 is in upright stance). Therefore, replacing the circle space with an ellipse one also will be in an upright stance position.

For claim 17, since the shape of the circle hollow space being substituted by the ellipse shape, the ellipse shape of 807 as modified by 828 is adapted to be positioned as claimed.

For claim 18, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the size of the cross section of the hollow space of 807 as modified by 828 covers $\frac{1}{3}$ up to $\frac{1}{2}$ of the entire cross section of the hump, since it has been held that where routine testing and general experimental conditions are present, discovering the optimum or workable ranges until the desired effect is achieved involves only routine skill in the art.

For claim 19, it would have been obvious to one having ordinary skill in the art at the time the invention was made to place the hollow space of 807 as modified by 828 in the upper half of the cross section of the hump, depending on how deep one wishes to

Art Unit: 3643

place the pad lining inside the horseshoe so that the hollow space can be exposed to prevent snow and ice from entering.

For claims 20 & 21, it would have been an obvious substitution of functional equivalent to substitute the circular hollow space of 807 as modified by 828 with two separated ellipses oriented in an upright stance or non-upright stance so as to be positioned parallel to each other and to the sole of said hoof, since it would perform the same function; i.e. to prevent snow and ice from entering the horseshoe.

For claims 22 & 23, it would have been an obvious substitution of functional equivalent to substitute the circular hollow space of 807 as modified by 828 with ellipses that are the same size, since it would perform the same function; i.e. to prevent snow and ice from entering the horseshoe.

For claim 24, 807 as modified by 828 teaches wherein: the at least one substantially tubular hollow space undergoes an elastic deformation upon load being placed thereon.

For claim 25, 807 as modified by 828 teaches wherein ends of said at least one substantially tubular hollow space are open (807 does not disclose that the ends are closed and it appears from the drawings that they are merely cut off at the end).

Response to Arguments

3. Applicant's arguments filed 10/5/04 have been fully considered but they are not persuasive.

Applicant argued that 807 does, at col. 2, lines 60-68, address a particular cross-section configuration of a portion of its construction. Nowhere, however,

does this or any other reference speak to the advantages of Applicant's construction, much less the structural combination.

Clearly, as Applicant pointed out, 807 does teach the separated portion of the hump, therefore, structurally, 807 has similar elements as that claimed by Applicant. As far as listing the advantages, that is intended functional use of a device and it's advantages. As long as 807 has the same features as that claimed by Applicant, the device of 807 can perform the same function and advantages as claimed by Applicant.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son T. Nguyen whose telephone number is 703-305-0765. The examiner can normally be reached on Mon-Thu from 10:00am to 5:30pm.

Art Unit: 3643

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 703-308-2574. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Son T. Nguyen
Primary Examiner
Art Unit 3643

stn